

What is claimed is:

1. A method for using a router as a context-sensitive processing array wherein a header of a data packet is encoded with information descriptive of data contained in a payload of the data packet and the data packet is encapsulated into another packet for transport across a network to an ingress point of the context-sensitive processing array, the method performed at the context-sensitive processing array comprising:

un-encapsulating the data packet and placing the data packet onto a broadcast medium such that one or more routers can receive the data packet substantially simultaneously;

programming at least one router to select data packets from the broadcast medium based on selection criteria that correspond to the encoded information in the packet header and;

selecting the encoded packets based on encoded information in the header, the selecting process organizing the encoded information into a predetermined hierarchy of information based on the selection criteria, the resulting organization corresponding to one or more of the following: taxonomic classification, geographic location information, identity of the source of origin of a goods in commerce, type of goods or service offered in commerce, and brand name for a goods or services offered in commerce.

2. The method of claim 1 wherein encoding the data packet header comprises encoding the descriptive information into a source field or a destination field, or both, of the header.

3. The method of claim 1 wherein the descriptive information comprises a pointer to the location of a source of dynamic pricing information.

4. The method of claim 3 wherein the dynamic pricing information comprises bid or ask pricing data for goods or services available in commerce.

5. The method of claim 1 wherein the encoded header is encoded according to a format defined for an Internet Protocol (IP) header field.

6. The method of claim 1 wherein the descriptive information conforms to a classification scheme for classifying data objects.

7. The method of claim 6 wherein the classification scheme classifies dynamic pricing information.

8. The method of claim 6 wherein the classification scheme corresponds to a hierarchy of goods or services available in commerce.

9. The method of claim 8 wherein the hierarchy of goods or services includes a plurality of levels including a category level, a topic level and a sub-topic level.

10. The method of claim 1 wherein the descriptive information is based on a hierarchical classification of bid or ask information.

11. The method of claim 1 wherein encoding the data packet header comprises encoding taxonomic information into a source field or a destination field, or both, of the header.

12. The method of claim 11 wherein the encoded taxonomic information comprises meta-data defining one or more parameters associated with the payload.

13. The method of claim 12 wherein the one or more parameters relate to geography, time and pricing.

14. The method of claim 11 wherein the encoded taxonomic information comprises meta-data describing goods or services, pricing for goods or services, and/or contact information relating to goods or services.

15. The method of claim 14 wherein the contact information relating to goods or services comprises a Uniform Resource Locator (URL) at which the goods or services may be bought, sold and/or investigated.

16. The method of claim 1 wherein the descriptive information relates to goods or services controlled by an electronic market or electronic auction.

17. The method of claim 1 wherein programming a router comprises providing the router with mask values for selectively identifying associated encoded data packet header values.

18, The method of claim 1 further comprising sorting the data packets into channels according to their respective encoded headers.

19. The method of claim 1 further comprising broadcasting to a user of a computer network a channel of data packets organized into the predetermined hierarchy.

20. A method of routing data packets, the method comprising:

generating data identifying the contents of the payload of a predefined data packet and encoding the generated data into a header field for the predefined data packet to form a pseudo-header for the packet;

encapsulating the predefined data packet, including the pseudo-header, into another data packet for transport across a data network; and

concentrating the predefined data packet to a predetermined destination based on the data packet's pseudo-header with other predefined data packets having pseudo-headers that match a predetermined selection criteria for selecting the subject matter of the payloads based on the encoded pseudo-header.

21. The method of claim 20 wherein generating the pseudo-header comprising encoding a data packet header with information descriptive of the payload's content.

22. The method of claim 21 wherein encoding the data packet's pseudo-header comprises encoding meta-data into a source field or a destination field, or both, of the header

of the predefined data packet if that predefined data packet uses the source field or destination field as a network source or destination address.

23. The method of claim 21 wherein the descriptive information comprises dynamic pricing information.

24. The method of claim 23 wherein the dynamic pricing information comprises bid or ask pricing data for goods or services available in commerce.

25. The method of claim 20 wherein concentrating the data packet comprises programming a router with mask values for selectively identifying associated encoded data packer header values.

26. The method of claim 25 wherein the mask values define a classification hierarchy including at least a category level, a topic level and a sub-topic level.

27. The method of claim 21 wherein a plurality of data packets are concentrated, and wherein concentrating the data packets comprises sorting the data packets into channels according to their respective address headers.

28. The method of claim 27 further comprising broadcasting a channel of concentrated data packets to a user of a computer network.

29. A data packet routing system comprising:

an addressing protocol defining a taxonomy of information into a predefined subject matter levels;

a packet generator for generating packets of data objects;

an address generator for imposing the taxonomy on the generated data packets by encoding an address header for each data packet according to the addressing protocol, the encoded address header including meta-data associating a data packet with a taxonomy information level of the data object in the packet; and

a plurality of routers for routing data packets to corresponding destinations according to the data packets' respective encoded address headers.

30. The system of claim 29 wherein encoding the data packet header comprises encoding the meta-data into a source field or a destination field, or both, of the header.

31. The system of claim 29 wherein each router selectively identifies data packets having encoded address headers corresponding to one or more predetermined categories, topics and/or sub-topics.

32. The system of claim 29 wherein the plurality of routers concentrate the data packets into channels according to their respective encoded address headers.

33. The system of claim 32 wherein the routers broadcast one or more channels of sorted data packets to a user of a computer network.